

I-39/Portage County B Interchange Improvements

Public Involvement Meeting
October 6, 2015



Agenda

- ▶ Explain project purpose and need
- ▶ Present interchange alternatives
- ▶ Compare alternatives
- ▶ Discuss next steps in the project development process



Purpose and Need

The **purpose** of the project is to address:

- ▶ Safety
- ▶ Operational quality (delay and backups)
- ▶ Bike/pedestrian accommodations



Purpose and Need

Specific **needs** identified include ...



TOMORROW RIVER STATE TRAIL

RAILROAD

State trail too close to RR

Crash history at NB merge

Off-ramp deceleration not long enough

Peak hour backups on ramp

On-ramp acceleration not long enough

Lack of bike or pedestrian facilities

Bridge clearance over County B deficient

Bridge columns too close to County B travel lanes under bridges



Project History

2014 public outreach

- ▶ Diamond interchange with northbound entrance loop presented as the preferred alternative
- ▶ Reviewed input obtained through outreach
- ▶ Completed additional analysis and traffic modeling
- ▶ Identified two additional alternatives
 - Diamond interchange with roundabouts
 - Diverging Diamond Interchange (DDI)



Interchange alternatives for consideration



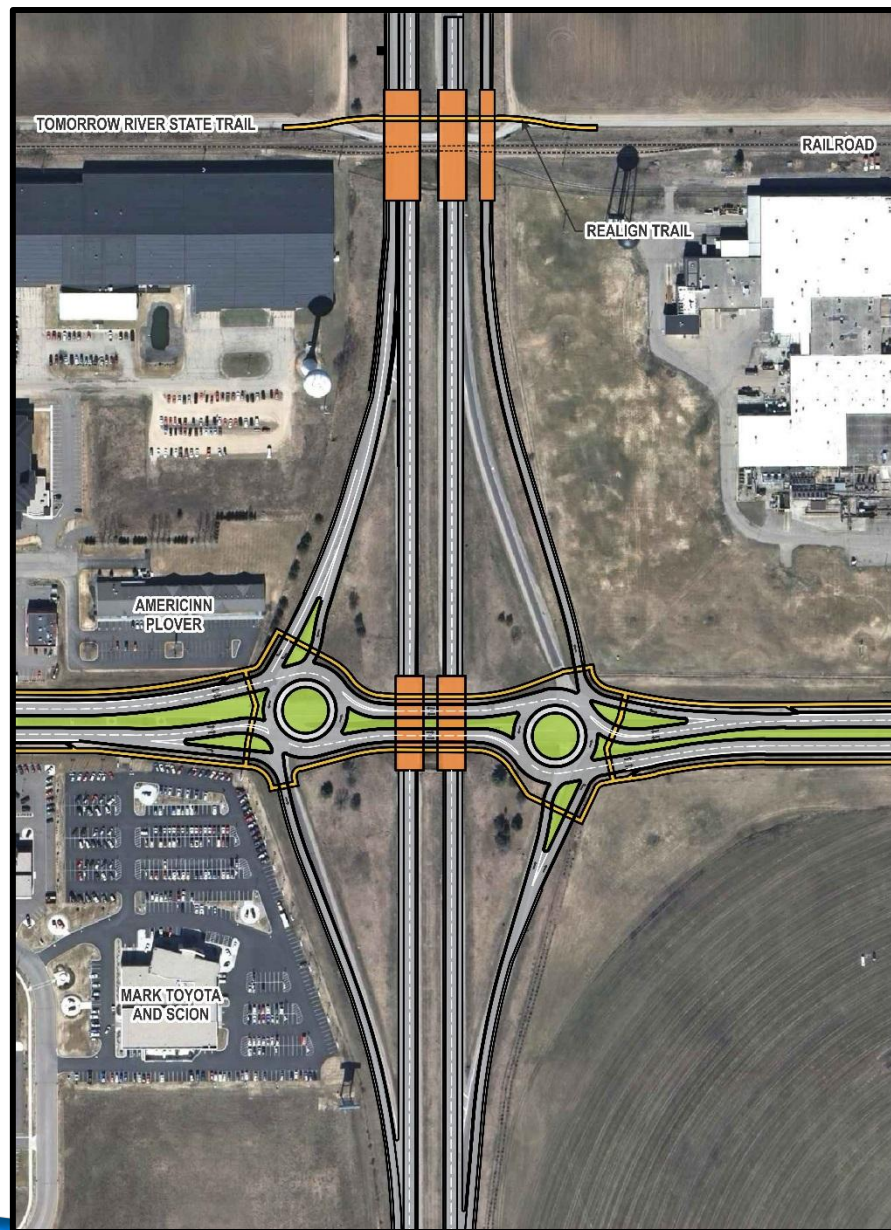
Diamond Interchange with Traffic Signals



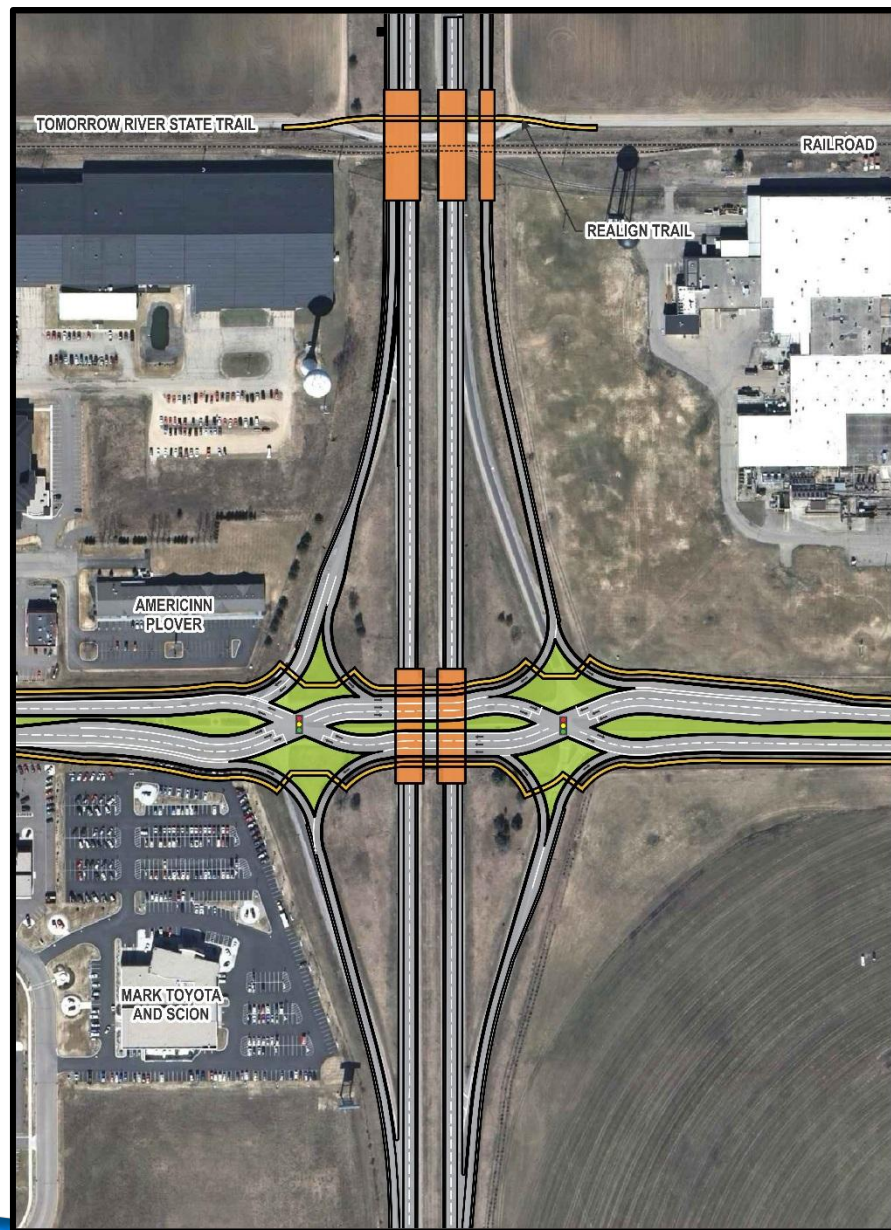
Interchange with Northbound Entrance Loop



Diamond Interchange with Roundabouts



Diverging Diamond Interchange



Alternatives comparison



Alternative similarities

Each alternative addresses:

- ▶ I-39 vertical clearance concern over County B
- ▶ Safety concerns at northbound entrance ramp
- ▶ Delay and level of service issue at the ramp terminals
- ▶ Bike and pedestrian needs along County B
- ▶ Tomorrow River State Trail railroad offset need



Diamond Interchange with Traffic Signals

Estimated cost
including real estate:
\$26-28 Million

Advantages

- ▶ Most familiar to motorists
- ▶ No modifications to current access

Disadvantages

- ▶ Dual eastbound to northbound left-turn lanes create entrance-ramp merge
- ▶ Requires dual southbound right-turn lanes and dual eastbound left turn lanes



Interchange with Northbound Entrance Loop

Estimated cost
including real estate:
\$29-31 Million

Advantages

- ▶ Meets desirable ramp spacing
- ▶ Reduced pedestrian conflicts
- ▶ Favors high volume eastbound to northbound movement

Disadvantages

- ▶ Significant real estate impacts in southeast quadrant
- ▶ Requires removal of Del Monte County B access driveway
- ▶ Change in expectation for eastbound to northbound motorists
- ▶ Requires dual southbound right turn lanes
- ▶ Requires additional bridge over County B
- ▶ Highest cost alternative



Diamond Interchange with Roundabouts

Estimated cost
including real estate:
\$26-28 Million

Advantages

- ▶ Roundabouts reduces crash severity
- ▶ No modifications to current access
- ▶ Least number of conflict points

Disadvantages

- ▶ Slightly increased travel time for County B
- ▶ Potentially higher real estate impact in northwest quadrant
- ▶ Requires dual southbound right turn lanes



Diverging Diamond Interchange

Video Tutorial

<https://www.youtube.com/watch?v=1pMopeJp1Uk>



Diverging Diamond Interchange

Estimated cost
including real estate:
\$28-29 Million

Advantages

- ▶ Favors high-volume eastbound to northbound movement
- ▶ No modifications to current access

Disadvantages

- ▶ Driver familiarity
- ▶ Complex pedestrian movements
- ▶ Slightly increased travel time for County B
- ▶ Potentially higher real estate impacts in the southwest quadrant



Next Steps in the Project Development Process

- ▶ November 2015 Select preferred alternative
 - ▶ Early 2016 Public involvement meeting to present preferred alternative and gather more information
 - ▶ Spring 2016 Complete environmental document
 - ▶ 2017 - 2018 Real estate acquisition
 - ▶ Early 2019 Complete design
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- ▶ At this time the project is not currently in the department's six-year highway improvement program. The earliest that the interchange would be reconstructed is late 2021. After work begins, the reconstruction is expected to take approximately two years.



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Questions?

